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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/734,221 | 12/11/2000 | Dan R. Littman | 1049-1-004n2 | 6077 |
| 7590 | 05/19/2004 | | EXAMINER | LI, BAO Q |
| Klauber & Jackson 411 Hackensack Avenue Hackensack, NJ 07601 | | | ART UNIT | PAPER NUMBER |
| | | | 1648 | |

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/734,221 | LITTMAN ET AL. |
| | Examiner Bao Qun Li | Art Unit 1648 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 08 October 2003.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-69 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) _____ is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) 1-69 are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. _____ .
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ . 5) Notice of Informal Patent Application (PTO-152)
6) Other: _____ .

DETAILED ACTION

Claims 1-69 are pending.

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-6, drawn to a method for detecting a presence of a translocation promoting agent, classified in class 435, subclass 3.
 - II. Claims 7-9, drawn to a method for identifying a viral envelope glycoprotein binding to the translocation promoter agent, classified in class 435, subclass 7.93.
 - IV. Claim 10, drawn to an assay for screening a drug, classified in class 435, subclass 4.
 - V. Claims 11-13, drawn to a kit for demonstrating a presence of a translocation promoting agent, classified in class 435, subclass 975.
 - VI. Claims 14-18, drawn to a method of prevention and/or treatment, classified in class 424, subclass 93.2.
 - VII. Claims 19-21, drawn to a pharmaceutical composition comprising CC-CKR5, classified in class 530, subclass 300.
 - VIII. Claims 22-26, drawn to a transgenic non-human mammal, classified in class 800, subclass 5.
 - IX. Claims 27-33, drawn to a transformed cell line, classified in class 435, subclass 350.
 - X. Claims 34-36, drawn to an antisense DNA molecule and a cell line comprising the same, classified in class 536, subclass 23.5.
 - XI. Claim 37, drawn to an assay for selecting a therapeutic agent by using a transformed cell line, classified in class 435, subclass 7.2.
 - XII. Claim 38, drawn to an assay for selecting a therapeutic agent by using a transgenic animal, classified in class 800, subclass 9.
 - XIII. Claims 39-40, drawn to a method of filtering a biological fluid, classified in class 435, subclass 174.
 - XIV. Claims 41-47, drawn to a transformed mammalian cell comprising a chemokine receptor, classified in class 435, subclass 372.

- XV. Claims 48-52, drawn to a method for identifying a human chemokine, classified in class 435, subclass 7.21.
- XVI. Claims 53-56, drawn to a method for identifying a drug that interferes with the HIV entry, classified in class 435, subclass 5.
- XVII. Claims 57-60, drawn to a method for identifying an antibody, classified in class 435, subclass 7.1.

Upon electing any of groups XIV-XVII, a further restriction to one of the following inventions is required under 35 U.S.C. 121:

- 1). The chemokine receptor is CC-CKR1,
- 2). The chemokine receptor is CC-CKR2A,
- 3). The chemokine receptor is CC-CKR2B,
- 4). The chemokine receptor is CC-CKR-3,
- 5). The chemokine receptor is CC-CKR-4,
- 6). The chemokine receptor is CC-CKR5,
- 7). The chemokine receptor is CXC-CR4

- XVIII. Claim 1-65, drawn to a nucleic acid encoding a chimeric translocation promoting agent, classified in class 536, subclass 23.1.
- XIV. Claims 66-67, drawn to a method of making an identifiable cell, classified in class 435, subclass 350.
- XX. Claims 68-69, drawn to a chimeric translocating promoting agent, classified in class 530, subclass 350.

The inventions are distinct, each from the other because of the following reasons:

- 2. Inventions of groups I-IV, VI, XI-XIII, XV-XVII and XIX are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions of groups I-IV, VI, XI-XIII, XV-XVII and XIX are directed to different methods having different modes of operation and produce different effects. For example, the method of Group I is for detecting a presence of a chemokine receptor, whereas the method of group XVII is directed to identify an antibody.

3. Inventions of groups V, VII-V, XIV, XVIII and XX are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions of groups V, VII-V, XIV, XVIII and XX are directed to different products having different structures and functions. For example, the product of Group VII is a chemokine receptor, whereas the method of group XVII is a nucleic acid molecule.

4. Inventions of groups 1) to 7) are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions of groups 1) to 7) are directed to different cell line that is transformed with structurally and functionally different chemokine receptors that exhibit different biological characteristics, e.g. the CXCR4 transformed cell is susceptible for T-cell tropic-tropic HIV infection, whereas the CC-CKR5 transformed cell line is susceptible for monocyte-tropic HIV infection.

5. Inventions Group VI and V are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the process for using the product as claimed in group VI can be practiced with another materially different product, such as an antibody to HIV gp120, rather than chemokine receptor.

6. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group XX; and the search for group 6) of CC-CKR5 transformed cell line does not need to search CXCR4 transformed cell line in group 7). Therefore, the restriction for examination purposes as indicated is proper.

7. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao Qun Li whose telephone number is 571-272-0904. The examiner can normally be reached on 7:00 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel can be reached on 571-272-0902. The fax phone number for the organization where this application or proceeding is assigned is 571-272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bao Qun Li
Art Unit 1648
May 17, 2004


5/17/04
JAMES HOUSEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600